

Claim 1 requires *inter alia* "wherein the actuator of at least one of the zones comprises means for providing a signal to an adjacent, upstream zone to begin conveying cartons *only when the sensor within the at least one zone senses the absence of a carton within that zone* when the conveyor switches from an accumulation mode to a transportation mode."

In rejecting Applicants' argument that Schiesser does not disclose that the above-quoted element, the Examiner points specifically to column 10, lines 22-55 of Schiesser. Applicants respectfully traverse the Examiner's conclusion that these lines (or any portion of Schiesser) disclose the quoted claim element above, as explained below.

Column 10, lines 22-55 of Schiesser refer to a representative "zone C" in Figs. 18 (showing accumulation mode) and Fig. 19 (showing conveying mode). Fig. 16A of Schiesser shows the representative zone of Figs. 18 and 19 expanded into a three-zone conveyor. Referring to Fig. 16A, it can be seen that this arrangement will not "provid[e] a signal to an adjacent, upstream zone to begin conveying cartons *only when the sensor within the at least one zone senses the absence of a carton within that zone* when the conveyor switches from an accumulation mode to a transportation mode."

In Fig. 16A, when changing from accumulation mode to conveying mode, all diaphragms 74 are deflated and all sensor rollers 46 are either raised or biased down by packages on the conveyor.

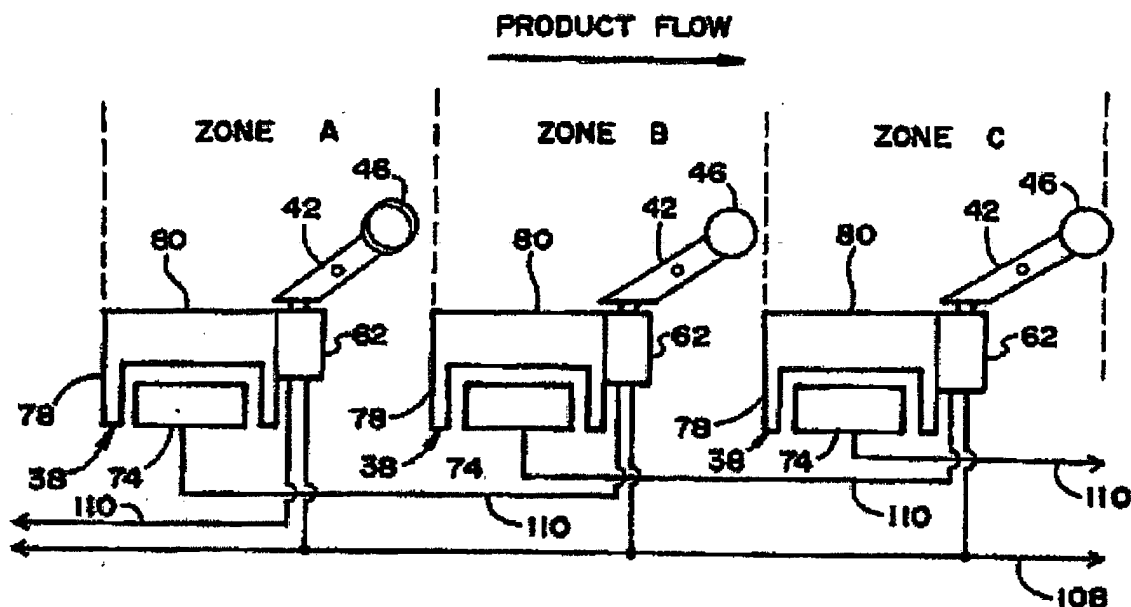


FIG. 16A

To begin conveying, the rightmost zone ("Zone C") begins to receive a fluid (for example, compressed air) to its diaphragm 74 through line 110. The diaphragm 74 next raises the contact member 78 of Zone C. Because the valve 62 is attached to the contact member 78, it raises as well. The raising of the valve 62 causes 1) the actuator 104 of the valve 62 in Zone C to be depressed and 2) the sensor roller 46 of Zone C to be retracted. When the actuator 104 of the valve 62 of Zone C is depressed, compressed air immediately flows through valve 62 from input line 108 to output line 110 attached to the valve 62. Output line 110 is attached to diaphragm 74 of Zone B.

As a result of the compressed air passed into output line 110 of Zone C, diaphragm 74 of Zone B raises contact member 78 of Zone B, thereby causing the 1) the actuator 104 of the valve 62 in Zone B to be depressed and 2) the sensor roller 46 of Zone B to be retracted. *The sensor*

roller 46 of Zone B is retracted whether or not a package is above the sensor roller 46 of Zone B. This is important to recognize because when the sensor roller of Zone B is retracted, it cannot signal Zone A to begin conveying *only when the sensor within the Zone B senses the absence of a carton within that zone*, as required by claim 1. The immediately retracted sensor roller 46 cannot sense whether packages remain in Zone B or not.

As a further result, when the actuator 104 of the valve 62 in Zone B is depressed, compressed air *immediately* flows from input line 108 to output line 110 of Zone B. The output line of Zone B is attached to the diaphragm of Zone A. As a result, the diaphragm 74 of Zone A *immediately* inflates, raises the contact member 78 and causes transportation of packages in Zone A regardless of whether packages have cleared Zone B.

From the above example, it can be seen that column 10, lines 22-55 of Schiesser does not disclose the element of claim 1 of the present application of "providing a signal to an adjacent, upstream zone to begin conveying cartons *only when the sensor within the at least one zone senses the absence of a carton within that zone* when the conveyor switches from an accumulation mode to a transportation mode." As shown above, Schiesser *immediately* retracts its sensor roller 46 of Zone B and signals Zone A to begin conveying *immediately* upon receiving the signal from Zone C to begin conveying. Therefore, the action of Zone B to signal Zone A to begin conveying is completely without reference to the presence of a carton in Zone B.

For the reasons set forth above, Shieser does not anticipate claim 1.

Claim 10 requires the limitation of "switching a zone from an accumulation mode to a transportation mode only when an adjacent, downstream zone does not sense the presence of a carton within the adjacent, downstream zone." As discussed above, Schiesser does not switch a zone from an accumulation mode to a transportation mode only when an adjacent, downstream

zone does not sense the presence of a carton within the adjacent, downstream zone. Therefore, for the same reasons as claim 1, Schiesser does not anticipate claim 10.

Conclusion

Based on the foregoing, the allowance of all of the claims is respectfully requested. If for any reason the Examiner is unable to allow the application on the next Office Action and feels that an interview would be helpful to resolve any remaining issues, the Examiner is requested to contact the undersigned attorney for the purpose of arranging such an interview.

Respectfully submitted,



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